

PRELIMINARY AMENDMENT OF CLAIMS

(Claim 1, previously presented)

1. A pile assembly employed in engineering and construction works comprising a pile body formed in a hollow column with a plurality of openings provided on the sidewall thereof, and

a core assembly having a plurality of wedge members mounted within said pile body,

wherein a guide rail allowing the guide of said core assembly is provided within said pile body,

wherein a said core assembly is guided via said guide rail to appropriately lead the tips of said wedge members to said openings.

(Claim 2, previously presented)

2. A pile assembly as defined in claim 1 in which said pile assembly is formed by splicing together the pile body divided in more than 2 portions, with said core assembly provided in each of said divided pile body portion.

(Claim 3, previously presented)

3. A pile assembly as defined in claim 2 in which a plurality of said guide rails are provided so as to extend across said divided pile body portions within said pile assembly.

(Claim 4 previously presented)

4. A pile assembly as defined in claim 2 in which a plurality of said guide rails are provided in said divided pile body portions respectively.

(Claim 5, previously presented)

5. A pile assembly as defined in claim 1 in which said openings are formed as incised apertures opened by exertion of outer force, wherein at least the lower edge

portions of tongue-shaped pieces of said opened apertures are connected to said pile body, while said tongue-shaped pieces constitute slopes.

(Claim 6, currently amended)

6. A pile assembly as defined in ~~one of claims 1 to 5~~ claim 1 and further provided with a spiral blade for digging soil on outer wall thereof for facilitating said pile assembly to be penetrated in the earth.

(Claim 7, currently amended)

7. A pile assembly as defined in ~~one of claims 1 to 6~~ claim 1 and further provided with a pointed leading member with excavating components at the lower end thereof.

(Claim 8, currently amended)

8. A pile assembly as defined in ~~one of claims 1 to 7~~ claim 1 in which said wedge members are formed to have length different from the length of wedge members adjacent thereto.

(Claim 9, currently amended)

9. A pile assembly as defined in ~~one of claims 1 to 8~~ claim 1 in which the cross-sectional shape of said pile body is designed to be either circular or rectangular.

(Claim 10, currently amended)

10. A pile assembly as defined in ~~claims 1 to 9~~ claim 1 in which said wedge members are mounted on said core assembly at corresponding position with said openings by components capable of changing angles, such as hinges.

(Claim 11, currently amended)

11. A magnet cross gauge provided with magnets employed in manufacturing of ~~said a pile assembly as defined in claims 1 to 10~~ comprising a pile body formed in a

hollow column with a plurality of openings provided on the sidewall thereof, and a core assembly having a plurality of wedge members mounted within said pile body, wherein a guide rail allowing the guide of said core assembly is provided within said pile body, and wherein said core assembly is guided via said guide rail to appropriately lead the tips of said wedge members to said openings,

wherein said magnet cross gauge allows an insertion of a plurality of said guide rails in said pile assembly while maintaining said guide rails in parallel with respect to one another,

wherein is further capable of fixing said guide rails to the inner wall of said pile body in parallel with respect to one another, and being removed from said pile while said guide rails remain fixed to the inner wall of said pile body thereafter.

(Claim 12, previously presented)

12. A magnet cross gauge as defined in claim 11 further comprising
a first magnet cross gauge member provided with a plurality of recesses on periphery thereof enabling said guide rails to be held therein, magnets mounted adjacent to said recesses, and a handle attached on one side thereof;

bar members fixed to said first magnet cross gauge member; and

a second magnet cross gauge member mounted to be movable or unmovable to said bar members while provided with a plurality of recesses on periphery thereof enabling said guide rails to be held therein and magnets mounted adjacent to said recesses.

(Claim 13, currently amended)

13. A method for fixing said guide rails within ~~said~~ a pile body by employing said a magnet cross gauge as defined in claims 11 or 12 provided with magnets employed in manufacturing of a pile assembly comprising a pile body formed in a hollow column with a plurality of openings provided on the sidewall thereof, and a core assembly having a plurality of wedge members mounted within said pile body, wherein a guide rail allowing the guide of said core assembly is provided within said pile body, and wherein

said core assembly is guided via said guide rail to appropriately lead the tips of said wedge members to said openings, wherein said magnet cross gauge allows an insertion of a plurality of said guide rails in said pile assembly while maintaining said guide rails in parallel with respect to one another, and wherein is further capable of fixing said guide rails to the inner wall of said pile body in parallel with respect to one another, and being removed from said pile while said guide rails remain fixed to the inner wall of said pile body thereafter,

said method comprising

a step to maintain a plurality of said guide rails in parallel with respect to one another by employing said magnet cross gauge;

a step to determine the position of said guide rails within said pile body after inserting said guide rails maintained in parallel to one another within said pile body;

a step to fix each of said guide rails to the inner wall of said pile body; and

a step to remove only said magnet cross gauge from within said pile body while having said guide rails remain fixed to the inner wall of said pile body.

(Claim 14, previously presented)

14. A method for fixing said guide rails as defined in claim 13 within said pile body in which said pile body is comprised of more than 2 said pile body portions, wherein said method for fixing said guide rails within said pile body is provided with a step performed prior thereto to splice together said pile body portions.

(Claim 15, previously presented)

15. A method for fixing said guide rails as defined in claim 13 within said pile body in which said pile body is comprised of more than 2 said pile body portions, wherein said method for fixing said guide rails within said pile body is performed to more than 2 said pile body portions respectively.

(Claim 16, currently amended)

16. A method for manufacturing said a pile assembly comprising a pile body

formed in a hollow column with a plurality of openings provided on the sidewall thereof, and a core assembly having a plurality of wedge members mounted within said pile body, wherein a guide rail allowing the guide of said core assembly is provided within said pile body, and wherein said core assembly is guided via said guide rail to appropriately lead the tips of said wedge members to said openings,

said method comprising

a step to fix said guide rails on the inner wall of said pile body either before or after said openings are formed on the sidewall of said pile body, and

a step to push the incised sections of the openings inward to form slopes after the incisions are formed, in case the incisions for said openings are not formed in said step to fix said guide rails, and to guide said core assembly provided with a plurality of wedge members with respective tips formed in acute angle within said pile body by employing said guide rails, and to position said core assembly so that the tips of said wedge members are guided by said slopes and placed adjacent to said openings.

(Claim 17, previously presented)

17. A method for manufacturing said pile assembly as defined in claim 16 in which said pile body is comprised of more than 2 said pile body portions,

wherein said method for manufacturing said pile assembly includes a step to splice together said pile body portions before fixing said guide rails onto the inner wall of said pile body,

wherein said step to fix said guide rails onto the inner wall of said pile body is to install said guide rails so as to extend across a plurality of said pile body portions spliced together.

(Claim 18, previously presented)

18. A method for manufacturing said pile assembly as defined in claim 16 in which said pile body is comprised of more than 2 said pile body portions,

wherein said step to fix said guide rails onto the inner wall of said pile body as well as said step to position the tips of said wedge members to be adjacent to said

openings are performed to each of said pile body portions,

wherein a step to splice together said pile body portions each provided with said core assembly is performed subsequent thereto.

(Claim 19, currently amended)

19. A method for manufacturing said pile assembly as mentioned in ~~one of claims 16 to 18~~ claim 16 comprising a step to fix a pointed leading member formed in a shape of cone or pyramid at one end of said pile assembly after performing said steps to fix said guide rails.